



AGRICULTURAL PEAK LOAD REDUCTION PROGRAM

APPLICATION FORM

Revised June 21, 2001

Program Management: California Energy Commission
1516 Ninth Street
Sacramento, CA 95814
(916) 654-4381

If you are a water agency send this completed application and supporting documentation to:

Agricultural Peak Load Reduction Program
Irrigation Training and Research Center
California Polytechnic State University
San Luis Obispo, CA 93407
(805) 756-7408

All others send this completed application and supporting documentation to:

Agricultural Peak Load Reduction Program
Center for Irrigation Technology
California State University, Fresno
5370 North Chestnut Avenue, M/S OF 18
Fresno, CA 93740-8021
(866) 297-3029



CENTER FOR
IRRIGATION
TECHNOLOGY

California State University Fresno



IRRIGATION TRAINING AND
RESEARCH CENTER

California Polytechnic State University
San Luis Obispo, CA

Agricultural Peak Load Reduction Program

This is the Application Form for the Agricultural Peak Load Reduction Program. It must be filled-out completely and clearly. Incomplete or unclear project proposals will be returned to the applicant. Applications may include multiple projects. Each project should be documented on a separate Project Proposal Worksheet.

IMPORTANT! – Note that Category 2 projects for a pump repair/retrofit should use the Category 2 Project Proposal Worksheet.

Supporting Documentation Requirements

All applications must contain a project budget and a clear description of how peak electricity demand savings will be achieved (if applicable). For Category 1 and 3 projects estimated to save 200 kW or more, the analysis of demand savings must be signed by a licensed engineer in the state of California.

Provide supporting documents used to estimate the existing and post-project peak period demand. Supporting documents include, but are not limited to:

- Energy audits performed by knowledgeable and experienced companies
- Utility billing records for the previous 12 months or peak period (June – September) as applicable.
- Equipment descriptions, including manufacturer's performance ratings (such as horsepower, BTU/hour, gallons/hour flow, etc.)
- Pump efficiency tests.
- Operation records, other than utility billing records, if available.
- Engineering calculations

Measurement and Verification Plan

The measurement and verification plan is critical. Peak period load reductions must be verifiable. It is the applicant's responsibility to propose a clear, viable, reliable, and accurate plan for measuring and verifying peak period load reductions. Verification plans might include:

- Inspection of utility billing records where time-of-use service meters have been set (note that installing a time-of-use meter may be a condition of project acceptance.
- Direct measurement of kW demand by installed instrumentation or an experienced electrician.
- Indirect proof of demand reductions based on other operational measurements and an approved engineering model.

Agricultural Peak Load Reduction Program

Application Summary

(attach a Project Proposal Work Sheet for each Project in this Application)

Application name/Designation:		Number of Individual Projects in this Application:	
Individual/Organization/Company/Water Agency Name:			
Business Type:	Phone:	Fax:	
Street/Mailing Address:			
City:	State:	Zip Code:	
Contact Name:			
Street Address:			
City:	State:	Zip Code:	
Phone:	Fax:	E-mail:	
Estimated Reduction in Peak Electric Demand in kW's		Estimated Grant:	
Select one or more appropriate project descriptions <input type="checkbox"/> Category 1. Efficient Electrical Equipment / Other Conservation Effort <input type="checkbox"/> Category 2. Pump Retrofit/Repair <input type="checkbox"/> Category 3. Advanced Metering/Telemetry <input type="checkbox"/> Category 4. Natural Gas-powered Equipment Retrofit			

I hereby certify under penalty of perjury that all information provided in this application and in any attachments is true and correct to the best of my knowledge.

Printed Name of Responsible Party:	Title:
Signature of Responsible Party:	Date:

For Grant Administrator Use Only:		
APLRP Application #:	Administrator:	
Date/Time Received:	By:	
Postmarked:	Delivered by:	
Project Evaluation by:	Date Started:	Date Finished:
Project Accepted by:	Date:	
Project Verification by:	Date:	
Estimated Grant Payment: \$		
Actual First Payment: \$	Date:	
Actual Second Payment: \$	Date:	
Verified kW Load Reduction:	By:	Date:

Agricultural Peak Load Reduction Program Categories 1, 3, and 4 Project Proposal Work Sheet

(Fill out one for each Project within the Application - Attach extra sheets as needed)

1. Project Name: (for all Categories) _____

Utility servicing this equipment/project _____

Account number: _____ Rate Schedule: _____

2. [] Applicant certifies that this project has not and will not receive any funds from any energy conservation program funded by the Public Goods Charge fund

3. Project Description: (for all Categories - attach sheets as necessary)

Proposed New Equipment (list all with names, size, and performance data; attach manufacturer's data if available): _____

Equipment to be Replaced or Modified: (list all with names, size, and performance data; attach manufacturer's data if available, describe modifications to each): _____

Software to be Replaced or Modified (include a reason for the replacement or modification):

Provide a written description of the project. Include a sketch layout/floor plan showing the location of all equipment to be replaced or modified. If a Category 1 or 3 project, describe how the project will reduce kW demand during the peak period of from 12 PM to 6 PM Monday through Friday, excluding holidays (include additional pages as needed).

Provide a budget for the project (you may provide a consolidated budget if this Application includes two or more projects). The budget should include at a minimum a summary of a) equipment costs, b) design/engineering costs, c) installation/modification costs, d) commissioning costs, and e) permitting costs. Copies of quotes and/or bids from suppliers/contractors should be submitted if available.

4. kW Load Reduction Calculations: (Ignore this if a Category 4 project)

Attach documentation as needed to support/explain how the Existing and Post-Project kW demand are established. Refer to section Supporting Documentation Requirements above.

Existing Peak Period kW demand: _____

How established: _____

Post Project Peak Period kW demand: _____

How estimated: _____

5. Measurement and Verification Plan:(Ignore this if a Category 4 project; indicate if this is a Category 3 project associated with an approved voluntary load-curtailement program)

Describe how peak period kW reductions will be measured and verified. If the modified equipment is not the only load on the service meter, describe how reductions due to the project will be identified:

6. Summary of Project: (for all Categories):

Proposed kW reduction during peak period _____ kW (Ignore for Category 4 projects)

Total project cost \$ _____

\$/kW project cost \$ _____ /kW (Ignore for Category 4 projects)

Estimated Construction Start Date _____

Estimated Construction Finish Date _____

7. Incentive Payment Calculator: (for all Categories)

For Category 1 and 3 projects:

a. 65% of the project cost: \$ _____

b. kW reduction * \$/kW(see schedule): \$ _____

Grant schedule for Category 1 and 3 projects:

\$350/kW by July 31, 2001

\$300/kW by Sept. 20, 2001

\$250/kW by March 31, 2003

Lessor of line a or line b. = CEC Grant: \$ _____

For Category 4 projects:

a. 65% of the project cost: \$ _____

Lessor of line a. or \$300,000 = CEC Grant: \$ _____

8. Retroactive Payment: (for Category 1 projects only)

The purchase of Category 1- High efficiency electrical agricultural equipment qualifying under the conditions of this grant may be retroactive to January 1, 2001.

If YES, you must provide documentation showing that no purchase of equipment or services occurred before January 1, 2001

Does this project plan to submit for retroactive payment? Yes _____ No _____

9. Environmental: (for all Categories)

Provide general information about the positive or potentially negative environmental impact the project would have? None ☐ Low ☐ Medium ☐ High ☐

Explain: _____

Design/engineering and Permitting:

What are the design/engineering and permitting requirements for the project?

Design needed: Yes ☐ No ☐

Permit required: Yes ☐ No ☐

If YES, which permits and from what agency? _____

At what stage is the project design and permit approval at?

Have not started ☐

Started but not completed ☐ (estimated completion date) _____

Completed ☐

10. Construction/installation complexity: (for all Categories)

Will this project be constructed with in-house personnel or with outside contractors? _____

How many sub-contractors are required to complete the work? _____

11. Project Funding:

If the applicant is a public agency, has funding for the project been approved by the district directors?

Yes ☐ No ☐ If not, when is approval anticipated or scheduled? _____

12. Experience and History of Applicant: (for all Categories)

Do you have experience with similar projects in the past? Yes ☐ No ☐

What internal/external resources will be used for the management of the project (i.e. in-house engineering and/or outside consulting support)?

Agricultural Peak Load Reduction Program

Category 2 Project Proposal for Pump Repair/Retrofit Work Sheet

(Fill out one for each Pump Repair/Retrofit Project within the Application - Attach extra sheets as needed)

1. Project Name: _____

Utility servicing this equipment/project _____

Account number: _____ Rate Schedule: _____

2. ☐ Applicant certifies that this project has not and will not receive any funds from any energy conservation program funded by the Public Goods Charge fund

3. ☐ Applicant certifies that this pump was operational (i.e. able to pump water) at the time of this application.

4. ☐ If the repair/retrofit is being done "in-house" the applicant certifies that the labor rates charged are similar to commercial pump repair businesses doing the same type of work.

5. Motor Pump Description:

Motor: Horsepower _____ Speed _____ Voltage _____

Efficiency Rating (if known): Standard High efficiency Premium high efficiency

Has this motor been rewound? Yes No

Is this motor controlled by a variable frequency drive? Yes No

Pump Type: Well turbine Centrifugal Submersible Short-coupled turbine

Impeller Type: Unknown Axial Semi-Open Closed

Pump Use: Water well Pressure boost Low-lift canal/ditch Tailwater return

Current overall pumping plant efficiency (if known): _____

Estimated overall pumping plant efficiency after repair/retrofit (if estimated): _____

6. Repair/Retrofit (check all that apply):

- ☐ Motor replacement (describe type, eff rate) _____
- ☐ Motor rewind
- ☐ Bearing/spider replacement
- ☐ Packing replacement
- ☐ Impeller repair
- ☐ Impeller replacement (describe type, model) _____
- ☐ Bowl/Volute repair
- ☐ Bowl/Volute replacement (describe type, model) _____
- ☐ Adding stage(s) (if a turbine)
- ☐ Well clean/modification to reduce drawdown (describe fully on a separate sheet)

7. If choosing to use the next 12 months kWh usage for calculating the grant describe how it was estimated. (i.e. kW load * hours of operation; kWh/AF * AF pumped; etc.)

8. Project Cost and Completion:

Total project cost \$_____ Estimated Finished Repair Date _____

9. Incentive Payment Calculator (choose one of the options):

Annual kWh usage (kWh): _____ based on: Previous 12 months _____ Estimated Next 12 months _____
(Provide utility billing if based on Previous 12 months usage, respond to Section 7. above if using
Estimated Next 12 months)

Option 1:

a. 65% of the project cost: \$_____

Pre-project operating plant efficiency (Pre-OPE): _____
Estimated post-project operating plant efficiency (Post-OPE): _____

b. $.10 * (kWh - (kWh * Pre-OPE / Post-OPE))$: \$ _____

Lessor of line a or line b. = CEC Grant: \$ _____

Option 2:

a. 65% of the project cost: \$ _____

b. $.10 * .25 * kWh$: \$ _____

Lessor of line a or line b. = CEC Grant: \$ _____

10. Project Funding:

If the applicant is a public agency, has funding for the project been approved by the district directors?

Yes ____ No ____

If not, when is approval anticipated or scheduled? _____

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